



Grain Transportation Report

A weekly publication of the Transportation and Marketing Programs/Transportation Services Division www.ams.usda.gov/GTR

April 3, 2014

WEEKLY HIGHLIGHTS

Contact Us

Contents

Article/ Calendar

Grain Transportation Indicators

Rail

Barge

Truck

Exports

Ocean

Brazil

Mexico

Grain Truck/Ocean Rate Advisory

Data Links

Specialists

Subscription Information

The next release is April 10, 2014 Slowdown in Chinese Iron Ore and Soybean Imports Reduced Ocean Freight Rates

For the week ending March 28, the ocean freight rate for shipping bulk grains from the U.S. Gulf to Japan, at \$51.50 per metric ton (mt), has declined by 11 percent since the week ending January 3. The rate from the Pacific Northwest to Japan, at \$28 per mt, has declined by 5 percent. The reduction in ocean freight rates is caused in part by excess vessel tonnage due to reduced iron ore imports by China and less-than-expected demand for South American soybeans. There is also speculation in the market of possible Chinese cancellations of Brazilian soybeans, which may further depress rates.

Corn Inspections Highest in 4 Years

For the week ending March 27, total inspections of corn for export from all major port regions reached 1.3 million metric tons (mmt), up 18 percent from the past week, up 161 percent from last year, and 105 percent above the 3-year average. Corn inspections were also the highest since August 26, 2010. Higher corn stocks and increased demand from Asia and Latin America helped boost corn inspections. Wheat inspections (.497 mmt) were down 11 percent from the previous week, and soybean inspections dropped 32 percent for the same period, as shipments to Asia decreased. Total inspections of grain (corn, wheat, and soybeans) reached 2.32 mmt, down 4 percent from the past week, up 42 percent from the same time last year, and 14 percent above the 3-year average. Outstanding export sales increased for corn but decreased for wheat and soybeans.

Improved Navigation Conditions Reduce Grain Barge Rates

Grain barge rates have been dropping for three weeks as navigation conditions have improved on the Illinois River, the Mississippi River in the St. Louis area, and on the Ohio River. A reduction in ice accumulations and adequate river levels have reduced costs to barge operators. In addition, over the last three weeks (March 9 - 29), an average of 363 empty barges per week have transited upbound at Mississippi River Locks 27 (near St. Louis, MO), a significant increase compared to January to early March when upbound empties averaged 137 barges per week. As a result of these factors, current St. Louis barge rates for export grain were 300 percent of tariff (\$11.97 per ton), 50 percent lower than the peak winter rate of 595 percent of tariff (\$23.74 per ton) that occurred in early March.

STB Announces Hearing on Rail Service Problems

On April 1, the Surface Transportation Board (STB) announced it is holding a public hearing on April 10 in Washington D.C. to address recent service problems on the rail network. Service problems have been reported for agricultural, coal, passenger, and other traffic. Railroad executives from BNSF Railway and Canadian Pacific have been directed to appear at the hearing to discuss ongoing and future efforts to improve service and provide a timeline for when service levels return to normal. Other Class I railroads have also been invited to participate. The STB is encouraging impacted shippers to appear at the hearing to discuss their service concerns and comment on the railroads' plans. Any interested person wishing to participate should file a notice of intent to participate with the STB by April 7.

Snapshots by Sector

Rail

U.S. railroads originated 19,745 **carloads of grain** during the week ending March 22, down 6 percent from last week, up 16 percent from last year, and down 4 percent from the 3-year average.

During the week ending March 27, average April non-shuttle **secondary railcar bids/offers per car** were \$1,875 above tariff, unchanged from last week and \$1,880 higher than last year. Average shuttle secondary railcar bids/offers per car were \$2,537.50 above tariff, up \$379 from last week and \$2,687.50 higher than last year.

Barge

During the week ending March 29, **barge grain movements** totaled 806,266 tons—24.7 percent higher than the previous week and 123.3 percent higher than the same period last year.

During the week ending March 29, 495 grain barges **moved down river**, up 27.2 percent from last week; 761 grain barges were **unloaded in New Orleans**, up 0.5 percent from the previous week.

Ocean

During the week ending March 27, 44 **ocean-going grain vessels** were loaded in the Gulf, 57 percent more than the same period last year. Sixty-two vessels are expected to be loaded within the next 10 days, 38 percent more than the same period last year.

During the week ending March 28, the ocean freight rate for shipping bulk grain from the Gulf to Japan was \$51.50 per mt, down 3 percent from the previous week. The cost of shipping from the Pacific Northwest to Japan was \$28 per mt, down 3 percent from the previous week.

Fuel

During the week ending March 31, U.S. average **diesel fuel prices** decreased 1 cent from the previous week to \$3.98 per gallon—down 2 cents from the same week last year.

Feature Article/Calendar

Grain Rail Service Update

Railroad service to grain shippers, which has deteriorated this fall and winter for several rail carriers, is expected to recover by late summer or fall, but could continue into 2015. Much of the rail service problems in the United States are centered on the BNSF Railway (BNSF), but similar problems have been reported for the Canadian National (CN) and Canadian Pacific (CP) railways' lines in Canada and even on portions of their lines in the United States. Problems associated with deteriorated rail service include grain shippers paying up to \$6,000 (about \$1.65 per bushel) to obtain empty railcars, grain piling up on the ground outside elevators awaiting rail transportation, and some grain shippers either paying ocean vessel demurrage charges, estimated between \$30,000 and \$50,000 per day (\$0.067 to \$0.11 cents per bushel), or missing vessels that departed before the delayed grain shipments could be loaded. These additional costs are reflected in the prices paid to farmers for their crops.

Since October 1, the total amount of U.S. grain moved by rail is estimated to be as many as 132,854 carloads behind expectations when compared to the previous record harvest in 2007/08 (see table). Total grain hauled by rail in the 6 months following the 2012/13 harvest (October – March) was down 13 percent from the 5-year average due to the severe drought impact on production. In fact, it was the smallest amount hauled by rail since 1999 during the same 6-month period. Nevertheless, BNSF and CP have hauled 13 and 11 percent less grain (221,188 and 129,200 carloads), respectively, during the 6-month period following the 2013/14 record grain harvest than they did during the first 6 months of the severely drought-impacted 2012/13 harvest (255,588 and 145,780 carloads). As a further comparison, BNSF and CN have hauled 84,001 and 15,813 fewer carloads, respectively, than during the first 6 months of the record 2007/08 harvest.

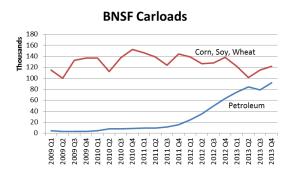
		Com	parison of R	ailroad Grain N	Movements			
		Surplus /		Surplus /		Surplus /	-	Surplus /
Period	BNSF	(Deficit)	CN	(Deficit)	CP	(Deficit)	U.S. Railroad	s (Deficit)
(Oct. through Mar.)	Carloads	2013 to period	Carloads	2013 to period	Carloads	2013 to period	Carloads	2013 to period
2007-2008	305,189	(84,001)	125,731	(15,813)	125,903	3,297	659,532	(132,854)
2008-2009	258,365	(37,177)	115,797	(5,879)	149,283	(20,083)	552,300	(25,622)
2009-2010	275,532	(54,344)	103,079	6,839	135,266	(6,066)	590,772	(64,094)
2010-2011	296,477	(75,289)	105,135	4,783	123,930	5,270	617,488	(90,810)
2011-2012	270,066	(48,878)	101,757	8,161	140,065	(10,865)	553,823	(27,145)
2012-2013	255,588	(34,400)	98,546	11,372	145,780	(16,580)	480,488	46,190
2013-201425 weeks	221,188	-	109,918	-	129,200	-	526,678	-
prior 5-year avg	271,206	(50,018)	104,863	5,055	138,865	(9,665)	558,974	(32,296)

In contrast, combined grain car loadings are up by an average of 36 percent for the other U.S. Class I railroads during the same period this year. Some grain traffic has switched from BNSF to other U.S. Class I carriers, with Kansas City Southern and Norfolk Southern hauling close to their all-time highs as a percentage of total grain rail traffic.

BNSF states that track work to expand future capacity was the primary reason for poor service because sections of track must be shut down at least 10–12 hours daily while the work is being done. Other factors cited by BNSF, CN, and CP include severe weather and increased traffic from several commodities, including grain, coal, intermodal, and petroleum.

One of the most severe winters in 20 years has slowed operations across the northern rail network. When temperatures are below -15° F, trains cannot be as long because the cold diminishes the effectiveness of air brakes. This means that railroads require more crew and locomotives to move the same amount of traffic. With significant backlogs already on the network from other factors, weather delays can be compounded and make the overall situation even worse.

Grain shippers are particularly concerned that increased railroad movements of shale oil have resulted in less railroad capacity for grain (see first figure). Quarterly shipments of petroleum moved by BNSF increased 46 percent from the 4th quarter of 2012 to the 4th quarter of 2013. In contrast, corn, soy, and wheat shipments during the 4th quarter of 2013 were 12 percent less than shipments during the 4th quarter of 2012, even though the 2013 harvest was 21 percent larger than in 2012.



Train speeds for BNSF grain trains have decreased and cycle times to Pacific Northwest markets have increased. BNSF

grain train speed has decreased 15 percent, from 23.8 miles per hour in February 2013 to 20.3 miles per hour during February 2014. During January, grain unit trains from Minnesota or Iowa to the Pacific Northwest were taking as long as 22 days, compared to a normal transit time of 12 days.

Consequently, BNSF grain shippers have paid record-high rates for delivery of empty grain cars in the secondary railcar markets (reportedly as much as \$6,000 per empty grain car (see second figure)—approximately \$1.65 per

bushel), which could make U.S. grain less competitive in world markets and/or reduce the amount of revenue earned by producers. Bids in the secondary railcar market for empty graincars have continued to climb with new records being set in December, January, February, and March. This indicates empty railcar supply is increasingly inadequate relative to demand.

Bids represent an additional premium to securing guaranteed railcar service during a specific time period. As only so many guaranteed railcars are made available by railroads for a given month, shippers will bid higher



and higher premiums to secure railcars as demand increases. Inadequate supply relative to demand has also driven up bids for service on Union Pacific Railroad (UP) as shippers switch carriers. These costs are in addition to what shippers must pay BNSF directly through tariffs and fuel surcharges, which currently total between \$4,000 and \$6,000 per car on key grain routes.

On March 21, BNSF reported that 16,761 railcars were past due by an average of 23.4 days. North Dakota had 7,474 railcars past due by an average of 21.4 days, Montana had 3,322 railcars late by an average of 25 days, South Dakota had 1,300 railcars past due by an average of 25.9 days, and Minnesota had 1,463 railcars past due by an average of 23.3 days. In addition, BNSF reported that North Region dwell time improved 11 percent since the first week of February and North Region train speed improved 1 percent during the same period.

Without reliable rail service to ship grain to the Pacific Northwest, there are reports of elevator operators storing millions of bushels of grain on the ground and refusing to buy more from farmers. Reports from North Dakota coop managers indicate 85 percent of this year's corn crop is still in either on-farm or warehouse storage. They also believe there is a good chance that this year's crop will not be moved before the new crop has to go into storage, which could create a major problem during the next harvest.

Marvin.Prater@USDA.gov; Adam.Sparger@USDA.gov

1

¹ USDA does not have secondary railcar market prices for empty railcars originating on CP and CN.

Grain Transportation Indicators

Table 1 **Grain Transport Cost Indicators**¹

_	Truck	Ra	il	Barge	Oc	eean
Week ending		Unit Train	Shuttle		Gulf	Pacific
04/02/14	267	103	109	231	230	199
03/26/14	268	342	306	261	237	206

¹Indicator: Base year 2000 = 100; Weekly updates include truck = diesel (\$/gallon); rail = near-month secondary rail market bid and monthly tariff rate with fuel surcharge (\$/car); barge = Illinois River barge rate (index = percent of tariff rate); and ocean = routes to Japan (\$/metric ton)

Source: Transportation & Marketing Programs/AMS/USDA

Table 2

Market Update: U.S. Origins to Export Position Price Spreads (\$/bushel)

Commodity	OriginDestination	3/28/2014	3/21/2014
Corn	ILGulf	-0.95	-0.95
Corn	NEGulf	-1.12	-1.10
Soybean	IAGulf	-1.27	-1.38
HRW	KSGulf	-1.85	-1.95
HRS	NDPortland	-3.15	-3.11

Note: nq = no quote

Source: Transportation & Marketing Programs/AMS/USDA

Pool Return Outlook

The **grain bid summary** illustrates the market relationships for commodities. Positive and negative adjustments in differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.

Figure 1

Grain bid Summary

| Futures: 3/28/2013 3/28/

Gulf-Louisiana

^{*}No quote for Illinois River as ice accumulation severely limited barge operations.

Rail Transportation

Table 3

Rail Deliveries to Port (carloads)¹

	Mississippi		Pacific	Atlantic &			Cross-Border
Week ending	Gulf	Texas Gulf	Northwest	East Gulf	Total	Week ending	Mexico ³
3/26/2014 ^p	920	1,397	5,691	977	8,985	3/22/2014	1,917
3/19/2014 ^r	760	1,431	4,543	845	7,579	3/15/2014	2,088
2014 YTD ^r	15,111	20,133	68,026	11,251	114,521	2014 YTD	22,310
2013 YTD ^r	7,582	10,112	53,722	7,865	80,667	2013 YTD	14,431
2014 YTD as % of 2013 YTD	199	199	127	143	142	% change YTD	155
Last 4 weeks as % of 2013 ²	2,015	127	127	290	153	Last 4wks % 2013	154
Last 4 weeks as % of 4-year avg. ²	196	97	116	128	119	Last 4wks % 4 yr	98
Total 2013	31,646	71,388	168,826	25,176	297,036	Total 2013	70,298
Total 2012	22,604	40,780	199,419	24,659	287,462	Total 2012	92,008

¹ Data is incomplete as it is voluntarily provided

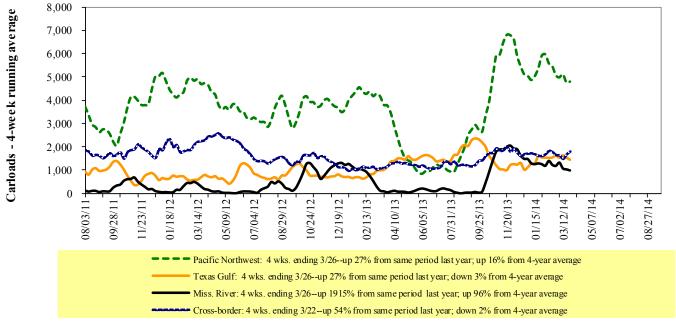
YTD = year-to-date; p = preliminary data; r = revised data; n/a = not available

Source: Transportation & Marketing Programs/AMS/USDA

Railroads originate approximately 29 percent of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

Figure 2

Rail Deliveries to Port



Source: Transportation & Marketing Programs/AMS/USDA

² Compared with same 4-weeks in 2013 and prior 4-year average.

³ Cross- border weekly data is aproximately 15 percent below the Association of American Railroads reported weekly carloads received by Mexican railroads to reflect switching between KCSM and FerroMex.

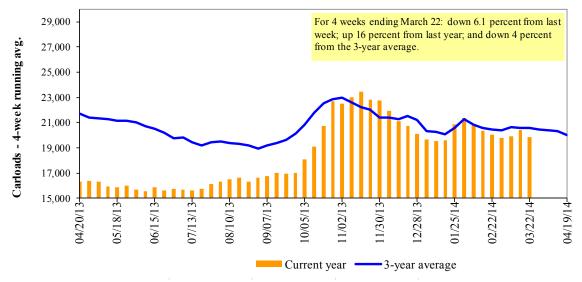
Table 4
Class I Rail Carrier Grain Car Bulletin (grain carloads originated)

	E	ast		West		U.S. total	Ca	nada
Week ending	CSXT	NS	BNSF	KCS	UP		CN	CP
03/22/14	1,995	2,660	8,576	914	5,609	19,754	4,750	5,168
This week last year	1,651	2,280	8,716	449	3,938	17,034	2,893	5,293
2014 YTD	24,179	35,738	101,751	11,678	69,621	242,967	46,358	55,394
2013 YTD	18,744	30,790	113,294	5,882	45,809	214,519	41,438	63,155
2014 YTD as % of 2013 YTD	129	116	90	199	152	113	112	88
Last 4 weeks as % of 2013	131	131	90	188	147	114	134	84
Last 4 weeks as % of 3-yr avg. ¹	99	111	81	173	111	96	112	88
Total 2013	86,466	137,915	454,262	34,412	222,258	935,313	190,125	272,753

¹As a percent of the same period in 2009 and the prior 3-year average. YTD = year-to-date.

Source: Association of American Railroads (www.aar.org)

Figure 3
Total Weekly U.S. Class I Railroad Grain Car Loadings



Source: Association of American Railroads

Table 5

Railcar Auction Offerings¹ (\$/car)²

Week ending				Delivery	y period			
3/27/2014	Apr-14	Apr-13	May-14	May-13	Jun-14	Jun-13	Jul-14	Jul-13
BNSF ³								
COT grain units	no offer	0	no offer	no bids	no offer	no bids	no offer	0
COT grain single-car ⁵	no offer	0	no offer	0	no offer	no bids	no offer	no bids
UP^4								
GCAS/Region 1	no offer	no bids	no offer	no bids	112	no bids	n/a	n/a
GCAS/Region 2	no offer	no bids	no offer	no bids	408	no bids	n/a	n/a

¹Auction offerings are for single-car and unit train shipments only.

Region 1 includes: AR, IL, LA, MO, NM, OK, TX, WI, and Duluth, MN.

Region 2 includes: CO, IA, KS, MN, NE, WY, and Kansas City and St. Joseph, MO.

Source: Transportation & Marketing Programs/AMS/USDA.

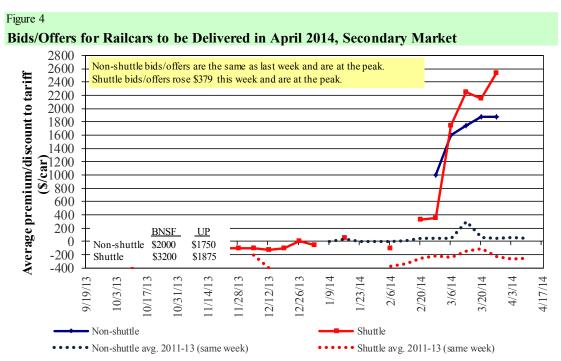
²Average premium/discount to tariff, last auction

³BNSF - COT = Certificate of Transportation; north grain and south grain bids were combined effective the week ending 6/24/06.

⁴UP - GCAS = Grain Car Allocation System

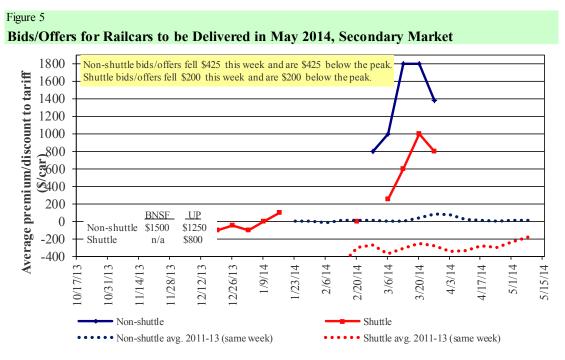
⁵Range is shown because average is not available. Not available = n/a.

The **secondary rail market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The **auction and secondary rail** values are indicators of rail service quality and demand/ supply.



Non-shuttle bids include unit-train and single-car bids. n/a = not available.

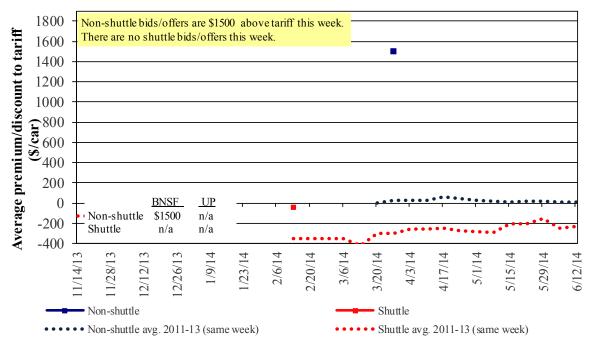
Source: Transportation & Marketing Programs/AMS/USDA



Non-shuttle bids include unit-train and single-car bids. n/a = not available.

Source: Transportation & Marketing Programs/AMS/USDA

Figure 6
Bids/Offers for Railcars to be Delivered in June 2014, Secondary Market



Non-shuttle bids include unit-train and single-car bids. n/a = not available.

Source: Transportation & Marketing Programs/AMS/USDA

Table 6
Weekly Secondary Railcar Market (\$/car)¹

Week ending			Delive	ry period		
3/27/2014	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14
Non-shuttle						
BNSF-GF	2,000	1,500	1,500	n/a	n/a	n/a
Change from last week	(750)	(300)	n/a	n/a	n/a	n/a
Change from same week 2013	2,010	1,500	n/a	n/a	n/a	n/a
UP-Pool	1,750	1,250	n/a	n/a	n/a	n/a
Change from last week	750	n/a	n/a	n/a	n/a	n/a
Change from same week 2013	1,750	n/a	n/a	n/a	n/a	n/a
Shuttle ²						
BNSF-GF	3,200	n/a	n/a	n/a	n/a	1,500
Change from last week	633	n/a	n/a	n/a	n/a	-
Change from same week 2013	3,325	n/a	n/a	n/a	n/a	1,538
UP-Pool	1,875	800	n/a	n/a	n/a	n/a
Change from last week	125	(200)	n/a	n/a	n/a	n/a
Change from same week 2013	2,050	1,000	n/a	n/a	n/a	n/a

¹Average premium/discount to tariff, \$/car-last week

Note: Bids listed are market INDICATORS only & are NOT guaranteed prices,

n/a = not available; GF = guaranteed freight; Pool = guaranteed pool

 $Sources:\ Transportation\ and\ Marketing\ Programs/AMS/USDA$

Data from James B. Joiner Co., Tradewest Brokerage Co.

²Shuttle bids are a new data series; prior to this we provided only non-shuttle rates.

Table 7

Tariff Rail Rates for Unit and Shuttle Train Shipments¹

Effective date:			Transfer	Fuel	Towiff place and	10400 no	Percent
3/1/2014	Origin region*	Destination region*	Tariff rate/car	surcharge_	Tariff plus surch	bushel ²	change Y/Y ³
	Origin region*	Destination region.	rate/car	per car	metric ton	Dustiet	1/1
<u>Unit train</u> Wheat	Wichita, KS	St. Louis, MO	\$3,191	\$182	\$33.50	\$0.91	1
Wilcat	Grand Forks, ND	Duluth-Superior, MN	\$3,596	\$104	\$36.75	\$1.00	1
	Wichita, KS	Los Angeles, CA	\$6,244	\$536		\$1.83	3
	Wichita, KS	New Orleans, LA	\$3,808	\$330	\$67.32 \$41.00	\$1.83	4
	Sioux Falls, SD	Galveston-Houston, TX	\$5,808	\$440	\$62.20	\$1.69	4
	Northwest KS Amarillo, TX	Galveston-Houston, TX Los Angeles, CA	\$4,076 \$4,275	\$351 \$489	\$43.96 \$47.30	\$1.20 \$1.29	4
Corn	Champaign-Urbana, IL	New Orleans, LA	\$3,192	\$362	\$35.29	\$0.90	2
Com	Toledo, OH	Raleigh, NC	\$4,686	\$416	\$50.66	\$1.29	4
	Des Moines, IA	Davenport, IA	\$2,078	\$77	\$21.40	\$0.54	3
	Indianapolis, IN	Atlanta, GA	\$4,061	\$312	\$43.43	\$1.10	3
	Indianapolis, IN	Knoxville, TN	\$3,469	\$200	\$36.44	\$0.93	3
	Des Moines, IA	Little Rock, AR	\$3,409	\$200	\$34.19	\$0.93	2
	Des Moines, IA	Los Angeles, CA	\$5,215	\$656	\$58.30	\$1.48	2
Soybeans	Minneapolis, MN	New Orleans, LA	\$3,529	\$402	\$38.30	\$1.46	-1
Soyucans	•	,					
	Toledo, OH Indianapolis, IN	Huntsville, AL Raleigh, NC	\$3,687 \$4,756	\$295 \$419	\$39.55 \$51.39	\$1.08 \$1.40	3 4
	-	•					
	Indianapolis, IN Champaign-Urbana, IL	Huntsville, AL New Orleans, LA	\$3,379 \$3,748	\$200 \$362	\$35.54 \$40.82	\$0.97 \$1.11	3
Shuttle Train	Champaigh-Orbana, iL	New Offeans, LA	\$3,740	\$302	\$40.82	\$1.11	3
Wheat	Great Falls, MT	Portland, OR	\$3,678	\$308	\$39.58	\$1.08	2
Wilcat	Wichita, KS	Galveston-Houston, TX	\$3,798	\$240	\$40.10	\$1.09	4
	Chicago, IL	Albany, NY	\$3,950	\$390	\$43.10	\$1.17	4
	Grand Forks, ND	Portland, OR	\$5,159	\$532	\$56.51	\$1.54	1
	Grand Forks, ND	Galveston-Houston, TX	\$6,084	\$554	\$65.92	\$1.79	0
	Northwest KS	Portland, OR	\$5,043	\$576	\$55.80	\$1.52	3
Corn	Minneapolis, MN	Portland, OR	\$5,000	\$648	\$56.09	\$1.42	3
00111	Sioux Falls, SD	Tacoma, WA	\$4,960	\$593	\$55.15	\$1.40	3
	Champaign-Urbana, IL	New Orleans, LA	\$3,011	\$362	\$33.50	\$0.85	2
	Lincoln, NE	Galveston-Houston, TX	\$3,510	\$346	\$38.29	\$0.97	5
	Des Moines, IA	Amarillo, TX	\$3,590	\$283	\$38.46	\$0.98	2
	Minneapolis, MN	Tacoma, WA	\$5,000	\$643	\$56.03	\$1.42	3
	Council Bluffs, IA	Stockton, CA	\$4,400	\$665	\$50.29	\$1.42	4
Soybeans	Sioux Falls, SD	Tacoma, WA	\$5,520	\$593	\$60.71	\$1.65	3
	Minneapolis, MN	Portland, OR	\$5,530	\$648	\$61.35	\$1.67	3
	Fargo, ND	Tacoma, WA	\$5,430	\$527	\$59.16	\$1.61	3
	Council Bluffs, IA	New Orleans, LA	\$4,175	\$418	\$45.61	\$1.24	5
	Toledo, OH	Huntsville, AL	\$2,862	\$295	\$31.35	\$0.85	4
	Grand Island, NE	Portland, OR	\$5,110	\$589	\$56.60	\$1.54	-2

¹A unit train refers to shipments of at least 25 cars. Shuttle train rates are available for qualified shipments of

⁷⁵⁻¹²⁰ cars that meet railroad efficiency requirements.

 $^{^2}$ Approximate load per car = 111 short tons (100.7 metric tons): com 56 lbs./bu., wheat & soybeans 60 lbs./bu.

³Percentage change year over year calculated using tariff rate plus fuel surchage

 $Sources:\ www.bnsf.com,\ www.cpr.ca,\ www.csx.com,\ www.uprr.com$

^{*}Regional economic areas defined by the Bureau of Economic Analysis (BEA)

Table 8

Tariff Rail Rates for U.S. Bulk Grain Shipments to Mexico

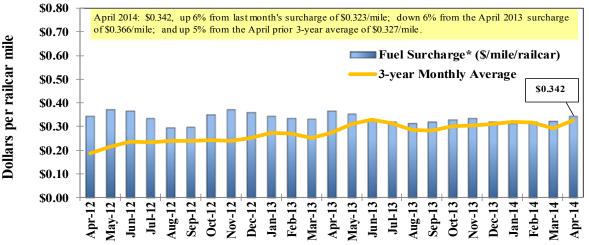
Effective date	e: 3/1/2014			Fuel			Percent
	Origin		Tariff	surcharge	Tariff plus surcl	harge per:	change
Commodity	state	Destination region	rate/car ¹	per car ²	metric ton ³	bus hel ³	Y/Y^4
Wheat	MT	Chihuahua, CI	\$6,360	\$563	\$70.73	\$1.92	1
	OK	Cuautitlan, EM	\$6,156	\$684	\$69.88	\$1.90	-6
	KS	Guadalajara, JA	\$6,559	\$660	\$73.77	\$2.01	-11
	TX	Salinas Victoria, NL	\$2,898	\$258	\$32.24	\$0.88	-17
Corn	IA	Guadalajara, JA	\$7,974	\$777	\$89.41	\$2.27	3
	SD	Celaya, GJ	\$7,656	\$736	\$85.75	\$2.18	-5
	NE	Queretaro, QA	\$7,317	\$690	\$81.81	\$2.08	2
	SD	Salinas Victoria, NL	\$5,880	\$560	\$65.80	\$1.67	3
	MO	Tlalnepantla, EM	\$6,755	\$670	\$75.87	\$1.93	2
	SD	Torreon, CU	\$6,722	\$617	\$74.98	\$1.90	3
Soybeans	MO	Bojay (Tula), HG	\$7,868	\$655	\$87.08	\$2.37	3
	NE	Guadalajara, JA	\$8,447	\$749	\$93.96	\$2.55	3
	IA	El Castillo, JA	\$8,855	\$732	\$97.95	\$2.66	3
	KS	Torreon, CU	\$6,864	\$465	\$74.88	\$2.04	3
Sorghum	TX	Guadalajara, JA	\$6,953	\$479	\$75.94	\$1.93	7
	NE	Celaya, GJ	\$7,212	\$669	\$80.51	\$2.04	3
	KS	Queretaro, QA	\$6,650	\$420	\$72.24	\$1.83	-2
	NE	Salinas Victoria, NL	\$5,368	\$492	\$59.87	\$1.52	-1
	NE	Torreon, CU	\$6,243	\$549	\$69.40	\$1.76	11

¹Rates are based upon published tariff rates for high-capacity shuttle trains. Shuttle trains are available for qualified

Sources: www.bnsf.com, www.uprr.com, www.kcsouthern.com

Figure 7

Railroad Fuel Surcharges, North American Weighted Average¹



¹ Weighted by each Class I railroad's proportion of grain traffic for the prior year.

Sources: www.bnsf.com, www.cn.ca, www.cpr.ca, www.csx.com, www.kcsi.com, www.nscorp.com, www.uprr.com

shipments of 75--110 cars that meet railroad efficiency requirements.

²Fuel surcharge adjusted to reflect the change in Ferrocarril Mexicano, S.A. de C.V railroad fuel surcharge policy as of 10/01/2009

³Approximate load per car = 97.87 metric tons: Corn & Sorghum 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

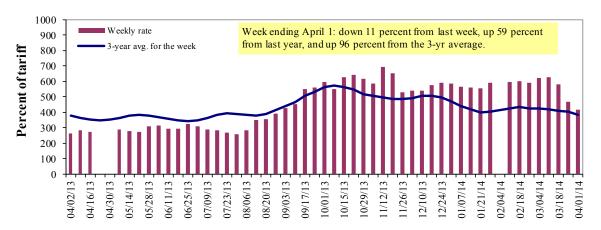
⁴Percentage change year over year calculated using tariff rate plus fuel surchage

^{*} Mileage-based fuel surcharges for March and April 2007 are estimated. Beginning January 2009, the Canadian Pacific fuel surcharge is computed by a monthly average of the bi-weekly fuel surcharge.

^{**} BNSF strike price (diesel price when fuel surcharges begin) changed from \$1.25/gal. to \$2.50/gal starting March 1, 2011. As a result, the weighted average fuel surcharge for March 2011 was \$0.227/mile instead of \$0.331/mile.

Barge Transportation

Figure 8
Illinois River Barge Freight Rate^{1,2}



¹Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); ²4-week moving average of the 3-year average.

Source: Transportation & Marketing Programs/AMS/USDA

Table 9
Weekly Barge Freight Rates: Southbound Only

	, — g . — g	Twin Cities	Mid- Mississippi	Lower Illinois River	St Louis	Cincinnati	Lower Ohio	Cairo- Memphis
		Cities	1411221221ppi	Kivei	St. Louis	Cincinnati	Omo	Mempins
Rate ¹	4/1/2014		421	416	300	336	336	250
	3/25/2014		468	469	350	381	381	281
\$/ton	4/1/2014		22.40	19.30	11.97	15.76	13.57	7.85
	3/25/2014		24.90	21.76	13.97	17.87	15.39	8.82
Curren	nt week % change f	from the sar	me week:					
	Last year		45	59	29	74	74	39
	3-year avg. ²		10	9	1	2	2	-1
Rate ¹	May	460	406	390	283	325	325	245
	July	465	400	393	293	338	338	261

¹Rate = percent of 1976 tariff benchmark index (1976 = 100 percent); ²4-week moving average; ton = 2,000 pounds;

Source: Transportation & Marketing Programs/AMS/USDA

Calculating barge rate per ton:

(Index * 1976 tariff benchmark rate per ton)/100

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map (see figure 9).

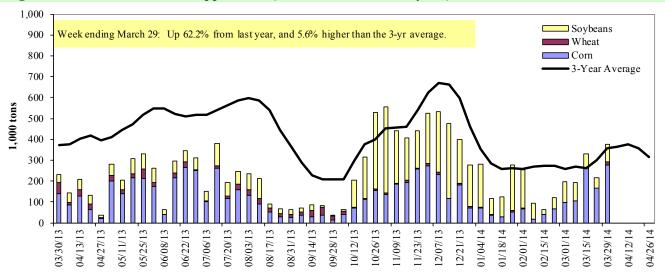
Bench mark tariff rates

Twin Cities
6.19
Mid-Miss
5.32
Miknois 4.64
St. Long
Care Memory 3 143

Care Memory 3 143

Figure 10

Barge Movements on the Mississippi River¹ (Locks 27 - Granite City, IL)



¹ The 3-year average is a 4-week moving average.

Source: U.S. Army Corps of Engineers

Table 10 **Barge Grain Movements (1,000 tons)**

Week ending 3/29/2014	Corn	Wheat	Soybeans	Other	Total
Mississippi River					
Rock Island, IL (L15)	3	0	0	0	3
Winfield, MO (L25)	50	0	44	0	94
Alton, IL (L26)	285	15	77	10	386
Granite City, IL (L27)	277	15	86	10	388
Illinois River (L8)	113	12	12	0	137
Ohio River (L52)	306	23	51	0	380
Arkansas River (L1)	5	28	4	1	38
Weekly total - 2014	588	66	141	11	806
Weekly total - 2013	194	85	61	21	361
2014 YTD ¹	4,092	378	3,427	51	7,948
2013 YTD	1,559	1,136	2,914	77	5,685
2014 as % of 2013 YTD	262	33	118	67	140
Last 4 weeks as % of 2013 ²	265	42	118	40	157
Total 2013	9,504	4,111	10,065	255	23,935

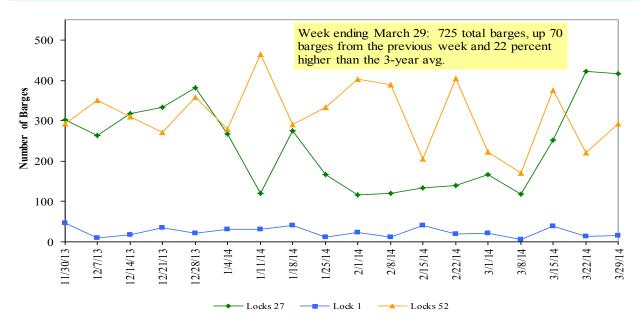
Weekly total, YTD (year-to-date) and calendar year total includes Miss/27, Ohio/52, and Ark/1; "Other" refers to oats, barley, sorghum, and rye.

Note: Total may not add exactly, due to rounding

Source: U.S. Army Corps of Engineers

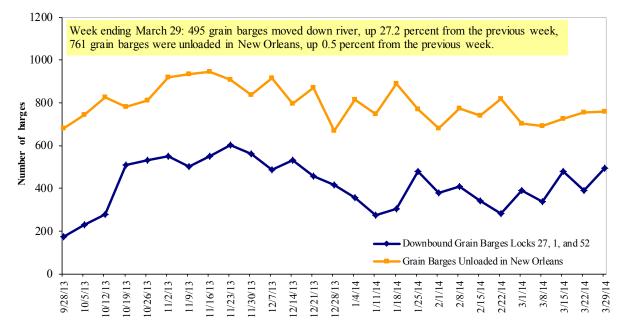
² As a percent of same period in 2013.

Figure 11
Upbound Empty Barges Transiting Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Locks and Dam 52



Source: U.S. Army Corps of Engineers

Figure 12 **Grain Barges for Export in New Orleans Region**



Source: U.S. Army Corps of Engineers and GIPSA

Truck Transportation

The **weekly diesel price** provides a proxy for trends in U.S. truck rates as diesel fuel is a significant expense for truck grain movements.

Table 11

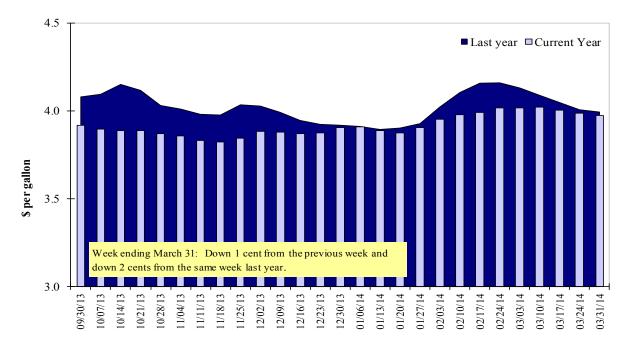
Retail on-Highway Diesel Prices¹, Week Ending 3/31/2013 (US \$/gallon)

			Chang	e from
Region	Location	Price	Week ago	Year ago
I	East Coast	4.094	-0.021	0.069
	New England	4.255	-0.024	0.107
	Central Atlantic	4.241	-0.036	0.158
	Lower Atlantic	3.955	-0.008	-0.003
II	Midwest ²	3.959	-0.016	-0.011
III	Gulf Coast ³	3.804	0.004	-0.111
IV	Rocky Mountain	3.975	-0.009	0.053
V	West Coast	3.990	-0.019	-0.126
	West Coast less California	3.908	-0.017	-0.108
	California	4.060	-0.021	-0.140
Total	U.S.	3.975	-0.013	-0.018

¹Diesel fuel prices include all taxes. Prices represent an average of all types of diesel fuel.

Source: Energy Information Administration/U.S. Department of Energy (www.eia.doe.gov)

Figure 13 Weekly Diesel Fuel Prices, U.S. Average



Source: Retail On-Highway Diesel Prices, Energy Information Administration, Dept. of Energy

²Same as North Central ³Same as South Central

Grain Exports

Table 12

U.S. Export Balances and Cumulative Exports (1,000 metric tons)

Cist Export Bulances and Camaia	tive Export	. ()					Corn	C 1	TD 4.1
	Wheat							Soybeans	Total
Week ending	HRW	SRW	HRS	SWW	DUR	All wheat			
Export Balances ¹									
3/20/2014	1,706	939	1,632	1,037	147	5,461	18,974	4,609	29,044
This week year ago	2,034	1,275	1,276	676	113	5,373	4,518	3,203	13,094
Cumulative exports-marketing year ²									
2013/14 YTD	9,506	6,427	4,911	3,273	338	24,456	21,398	39,835	85,689
2012/13 YTD	7,399	3,675	4,625	3,845	375	19,919	10,648	32,382	62,949
YTD 2013/14 as % of 2012/13	128	175	106	85	90	123	201	123	136
Last 4 wks as % of same period 2012/13	85	76	130	158	141	104	420	181	232
2012/13 Total	10,019	5,039	5,825	4,619	591	26,093	17,980	36,220	80,293
2011/12 Total	9,904	4,319	6,312	5,601	491	26,627	37,900	36,727	101,254

¹ Current unshipped export sales to date

Note: YTD = year-to-date. Marketing Year: wheat = 6/01-5/31, corn & soybeans = 9/01-8/31

Source: Foreign Agricultural Service/USDA (www.fas.usda.gov)

Table 13 **Top 5 Importers**¹ **of U.S. Corn**

Week ending 3/20/2014	Total Comm	nitments ²	% change	Exports ³
	2013/14	2012/13	current MY	
	Current MY	Last MY	from last MY	2012/13
	- 1,0)00 mt -		- 1,000 mt -
Japan	8,654	5,204	66	7,000
Mexico	9,210	3,457	166	4,370
China	4,053	2,364	71	2,450
Venezuela	707	486	46	1,158
Taiwan	1,272	400	218	512
Top 5 Importers	23,895	11,910	101	15,490
Total US corn export sales	40,372	15,167	166	18,670
% of Projected	98%	82%		
Change from prior week	1,408	296		
Top 5 importers' share of U.S.				
corn export sales	59%	79%		83%
USDA forecast, March 2014	41,348	18,601	122	
Corn Use for Ethanol USDA				
forecast, March 2014	127,000	118,059	8	

⁽n) indicates negative number.

² Shipped export sales to date; new marketing year in in effect for corn and soybeans

¹Based on FAS Marketing Year Ranking Reports - www.fas.usda.gov; Marketing year (MY) = Sep 1 - Aug 31.

 $^{^2} Cumulative\ Exports\ (shipped) + Outstanding\ Sales\ (unshipped), FAS\ Weekly\ Export\ Sales\ Report, or\ Export\ Sales\ Query-http://www.fas.usda.gov/esrquery/$

³FAS Marketing Year Final Reports - www.fas.usda.gov/export-sales/myfi_rpt.htm(Carry-over plus Accumulated Exports)

Table 14

Top 5 Importers¹ of U.S. Soybeans

Week Ending 3/20/2014	Total Commi	tments ²	% change	Exports ³
	2013/14	2012/13	current MY	
	Current MY	Last MY	from last MY	2012/13
	- 1,000 n	nt -		- 1,000 mt -
China	27,647	21,624	28	21,522
Mexico	2,905	1,981	47	2,565
Japan	1,630	1,453	12	1,751
Indonesia	1,889	1,217	55	1,682
Taiwan	1,055	1,020	3	1,120
Top 5 importers	35,126	27,295	29	28,641
Total US soybean export sales	44,444	35,585	25	37,060
% of Projected	107%	99%		
Change from prior week	12	66		
Top 5 importers' share of U.S.				
soybean export sales	79%	77%		
USDA forecast, March 2014	41,689	35,967	16	

⁽n) indicates negative number.

Table 15 **Top 10 Importers**¹ **of All U.S. Wheat**

Week Ending 3/20/2014	Total Comm	itments ²	% change	Exports ³
	2013/14	2012/13	current MY	_
	Current MY	Last MY	from last MY	2012/13
	- 1,0	000 mt -		- 1,000 mt -
Japan	2,811	3,463	(19)	3,544
Nigeria	2,628	2,762	(5)	3,002
Mexico	2,859	2,671	7	2,761
Philippines	1,931	1,819	6	1,965
Egypt	1,226	199	517	1,678
Korea	1,216	1,372	(11)	1,385
Taiwan	950	989	(4)	1,038
China	4,259	789	440	743
Brazil	3,910	406	864	527
Colombia	723	559	29	600
Top 10 importers	22,512	15,028	50	17,243
Total US wheat export sales	29,916	25,292	18	26,348
% of Projected	93%	92%		
Change from prior week	401	580		
Top 10 importers' share of				
U.S. wheat export sales	75%	59%		65%
USDA forecast, March 2014	32,016	27,439	17	

⁽n) indicates negative number.

¹Based on FAS Marketing Year Ranking Reports - www.fas.usda.gov; Marketing year (MY) = Sep 1 - Aug 31.

 $^{^2} Cumulative \ Exports \ (shipped) + Outstanding \ Sales \ (unshipped), FAS \ Weekly \ Export \ Sales \ Report, or \ Export \ Sales \ Query-http://www.fas.usda.gov/esrquery/$

³ FAS Marketing Year Final Reports - www.fas.usda.gov/export-sales/myfi_rpt.htm. (Carryover plus Accumulated Exports)

¹ Based on FAS Marketing Year Ranking Reports - www.fas.usda.gov; Marketing year = Jun 1 - May 31.

 $^{^2\} Cumulative\ Export\ (shipped) + Outstanding\ Sales\ (unshipped),\ FAS\ Weekly\ Export\ Sales\ Report,\ or\ Export\ Sales\ Query--http://www.fas.usda.gov/esrquery/$

 $^{^3}$ FAS Marketing Year Final Reports - www.fas.usda.gov/export-sales/myfi_rpt.htm.

Table 16
Grain Inspections for Export by U.S. Port Region (1,000 metric tons)

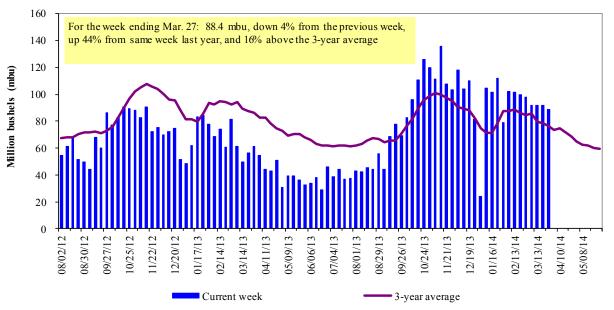
Port	Week ending	Previous	Current Week			2014 YTD as	Last 4-w	eeks as % of	Total ¹
regions	03/27/14	Week ¹	as % of Previous	2014 YTD ¹	2013 YTD ¹	% of 2013 YTD	2013	3-yr. avg.	2013
Pacific Northwes	, t								
Wheat	309	254	121	2,862	3,014	95	117	105	11,585
Corn	246	188	131	1,379	1,105	125	130	98	2,973
Soybeans	70	336	21	4,195	3,424	123	151	159	9,090
Total	625	778	80	8,436	7,543	112	132	121	23,647
Mississippi Gulf	023	770	00	0,450	7,540	112	102	121	23,047
Wheat	74	97	77	1,019	2,291	44	34	48	9,711
Corn	956	775	123	7,415	2,648	280	307	175	14,828
Soybeans	261	369	71	8,868	6,228	142	180	123	21,462
Total	1,292	1,241	104	17,302	11,167	155	176	133	46,002
Texas Gulf	1,2,2	-,	101	11,000	11,10.	100	1.0	100	.0,002
Wheat	84	192	44	1,663	1,524	109	115	83	9,039
Corn	0	0	n/a	144	42	338	85	26	255
Soybeans	0	0	n/a	255	122	208	n/a	0	908
Total	84	192	44	2,061	1,689	122	113	71	10,203
Interior									
Wheat	17	13	137	256	233	110	82	83	1,244
Corn	92	123	75	1,277	658	194	155	81	3,943
Soybeans	129	49	264	1,259	1,162	108	378	117	3,212
Total	239	185	129	2,792	2,054	136	127	93	8,399
Great Lakes									
Wheat	0	0	n/a	0	8	0	0	0	884
Corn	0	0	n/a	0	0	n/a	n/a	0	0
Soybeans	0	0	n/a	0	4	0	0	0	699
Total	0	0	n/a	0	12	0	0	0	1,583
Atlantic									
Wheat	13	0	n/a	44	296	15	0	0	645
Corn	5	11	41	35	2	n/a	n/a	138	242
Soybeans	61	12	528	907	613	148	163	210	1,652
Total	79	23	347	986	911	108	82	141	2,540
U.S. total from p	orts ²								
Wheat	497	555	89	5,844	7,367	79	155	122	33,108
Corn	1,299	1,097	118	10,250	4,456	230	378	177	22,241
Soybeans	522	766	68	15,483	11,552	134	79	86	37,024
Total	2,318	2,418	96	31,577	23,375	135	145	121	92,373

¹ Data includes revisions from prior weeks; some regional totals may not add exactly due to rounding.

Source: Grain Inspection, Packers and Stockyards Administration/USDA (www.gipsa.usda.gov); YTD= year-to-date; n/a = not applicable

The United States exports approximately one-quarter of the grain it produces. On average, this includes nearly 45 percent of U.S.-grown wheat, 35 percent of U.S.-grown soybeans, and 20 percent of the U.S.-grown corn. Approximately 61 percent of the U.S. export grain shipments departed through the U.S. Gulf region in 2013.

Figure 14
U.S. grain inspected for export (wheat, corn, and soybeans)

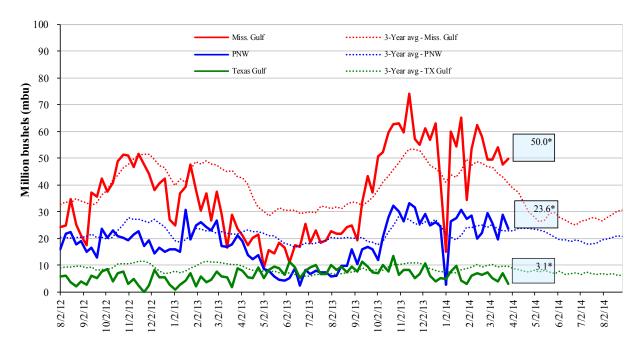


Source: Grain Inspection, Packers and Stockyards Administration/USDA (www.gipsa.usda.gov)

Note: 3-year average consists of 4-week running average

Figure 15

U.S. Grain Inspections: U.S. Gulf and PNW¹ (wheat, corn, and soybeans)



Source: Grain Inspection, Packers and Stocky ards Administration/USDA (www.gipsa.usda.gov); *mbu, this week.

Mar. 27: % change from:	MSGulf	TX Gulf	U.S. Gulf	PNW
Last week	up 5	down 56	down 3	down 19
Last year (same week)	up 111	down 65	up 63	up 11
3-yr avg. (4-wk mov. avg.)	up 45	down 65	up 23	up 6

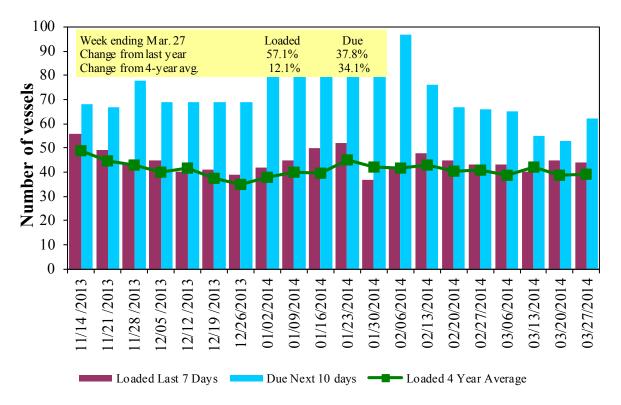
Ocean Transportation

Table 17
Weekly Port Region Grain Ocean Vessel Activity (number of vessels)

•		•		Pacific	Vancouver
		Gulf		Northwest	B.C.
		Loaded	Due next		
Date	In port	7-days	10-days	In port	In port
3/27/2014	63	44	62	14	n/a
3/20/2014	77	45	53	17	n/a
2013 range	(1660)	(2056)	(3181)	(024)	n/a
2013 avg.	32	33	51	12	n/a

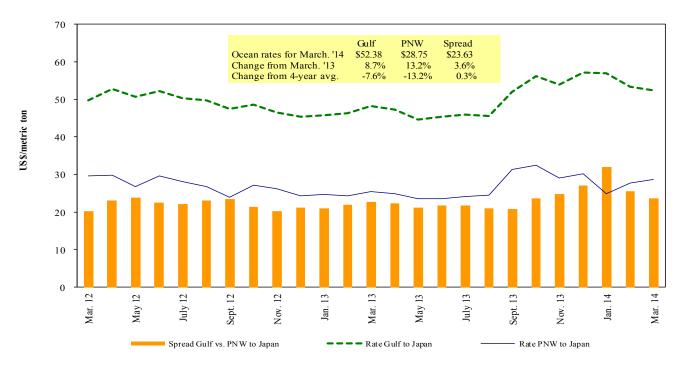
Source: Transportation & Marketing Programs/AMS/USDA

Figure 16
U.S. Gulf¹ Vessel Loading Activity



Source:Transportation & Marketing Programs/AMS/USDA ¹U.S. Gulf includes Mississippi, Texas, and East Gulf.

Figure 17 **Grain Vessel Rates, U.S. to Japan**



Source: O'Neil Commodity Consulting

Table 18

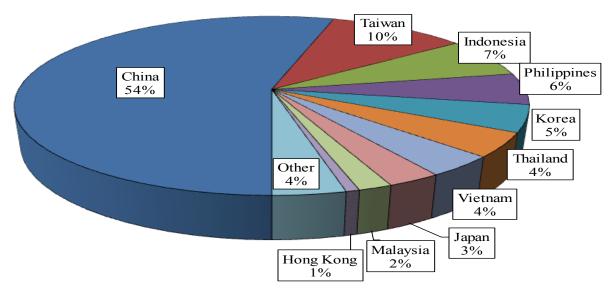
Ocean Freight Rates For Selected Shipments, Week Ending 3/29/2014

Export	Import	Grain	Loading	Volume loads	Freight rate
region	region	types	date	(metric tons)	(US\$/metric ton)
U.S. Gulf	Algeria	Wheat	Mar 10/15	28,000	38.00
U.S. Gulf	China	Heavy Grain	Feb 15/25	55,000	49.00
U.S. Gulf	Tanzania ¹	Wheat	Mar 24/Apr 4	16,100	133.31
PNW	Bangladesh	Wheat	Apr 22/May 1	13,900	79.44
PNW	Bangladesh	Wheat	Apr 22/May 1	11,150	79.44
PNW	Philippines	Soybean Meal	Mar 5/15	6,750	77.40
St. Lawrence	Algeria	Wheat	Mar 10/15	25,000	51.00
Brazil	China	Heavy Grain	Apr 5/15	60,000	42.75
Brazil	China	Heavy Grain	Apr 15/24	60,000	41.50
Brazil	China	Heavy Grain	Apr 1/30	60,000	42.25
Brazil	China	Heavy Grain	Mar 20/30	60,000	37.50 op 39.50
Brazil	China	Heavy Grain	Mar 20/25	60,000	40.50
Brazil	China	Heavy Grain	Mar 15/25	60,000	39.25
Brazil	China	Heavy Grain	Mar 1/10	60,000	38.50
Brazil	China	Heavy Grain	Mar 3/7	60,000	40.00
Brazil	China	Heavy Grain	Mar 5/15	60,000	40.50
Brazil	China	Heavy Grain	Mar 10/20	60,000	39.50

In 2012, containers were used to transport 8 percent of total U.S. waterborne grain exports, up 1 percentage point from 2011. Approximately 66 percent of U.S. waterborne grain exports in 2012 went to Asia, of which 11 percent were moved in containers. Asia is the top destination for U.S. containerized grain exports—96 percent in 2012.

Figure 18

Top 10 Destination Markets for U.S. Containerized Grain Exports, December 2013



Source: USDA/Agricultural Marketing Service/Transportation Services Division analysis of Port Import Export Reporting Service (PIERS) data

Note: The following Harmonized Tariff Codes are used to calculate containerized grains movements: 100190, 100200, 100300, 100400, 100590, 100700, 110100, 230310, 110220, 110290, 120100, 230210, 230990, 230330, and 120810.

Figure 19
Monthly Shipments of Containerized Grain to Asia



Source: USDA/Agricultural Marketing Service/Transportation Services Division analysis of Port Import Export Reporting Service (PIERS) data Note: The following Harmonized Tariff Codes are used to calculate containerized grains movements: 100190, 100200, 100300, 100400, 100590, 100700, 110100, 230310, 110220, 110290, 120100, 230210, 230990, 230330, and 120810.

April 3, 2014

Contacts and Links

Coordinators Surajudeen (Deen) Olowolayemo Pierre Bahizi Adam Sparger	surajudeen.olowolayemo@ams.usda.gov pierre.bahizi@ams.usda.gov adam.sparger@ams.usda.gov	(202) 720 - 0119 (202) 690 - 0992 (202) 205 - 8701
Weekly Highlight Editors Marina Denicoff Surajudeen (Deen) Olowolayemo April Taylor Nicholas Marathon	marina.denicoff@ams.usda.gov surajudeen.olowolayemo@ams.usda.gov april.taylor@ams.usda.gov nick.marathon@ams.usda.gov	(202) 690 - 3244 (202) 720 - 0119 (202) 295 - 7374 (202) 690 - 4430
Grain Transportation Indicators Surajudeen (Deen) Olowolayemo	surajudeen.olowolayemo@ams.usda.gov	(202) 720 - 0119
Rail Transportation Marvin Prater Johnny Hill Adam Sparger	marvin.prater@ams.usda.gov johnny.hill@ams.usda.gov adam.sparger@ams.usda.gov	(540) 361 - 1147 (202) 690 - 3295 (202) 205 - 8701
Barge Transportation Nicholas Marathon April Taylor	nick.marathon@ams.usda.gov april.taylor@ams.usda.gov	(202) 690 - 4430 (202) 295 - 7374
Truck Transportation April Taylor	april.taylor@ams.usda.gov	(202) 295 - 7374
Grain Exports Johnny Hill Marina Denicoff	johnny.hill@ams.usda.gov marina.denicoff@ams.usda.gov	(202) 690 - 3295 (202) 690 - 3244
Ocean Transportation Surajudeen (Deen) Olowolayemo (Freight rates and vessels) April Taylor (Container movements)	surajudeen.olowolayemo@ams.usda.gov april.taylor@ams.usda.gov	(202) 720 - 0119 (202) 295 - 7374

Subscription Information: Send relevant information to <u>GTRContactUs@ams.usda.gov</u> for an electronic copy (printed copies are also available upon request).

Preferred citation: U.S. Dept. of Agriculture, Agricultural Marketing Service. *Grain Transportation Report*. April 3, 2014. Web: http://dx.doi.org/10.9752/TS056.04-03-2014

The U.S. Department of Agriculture (USDA) prohibits discrimination in all of its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex (including gender identity and expression), marital status, familial status, parental status, religion, sexual orientation, political beliefs, genetic information, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).